

Abstract

The invention concerns a method for regulating an electromechanically power-splitting hybrid drive system (2) of a motor vehicle, having an internal combustion engine (VM) and two electric motors (E1, E2) that are coupled by way of a transmission (P1, P2, 4), as well as an
5 electromechanically power-splitting hybrid drive system (2) for a motor vehicle. It is proposed that, based on coupling conditions of the transmission (P1, P2, 4), respective target rotation speeds ($n_{VM \text{ setpoint}}$, $n_{E1 \text{ setpoint}}$, $n_{E2 \text{ setpoint}}$) and target torques ($M_{VM \text{ setpoint}}$, $M_{E1 \text{ setpoint}}$, $M_{E2 \text{ setpoint}}$) be calculated for the internal combustion engine (VM) and the two electric motors (E1, E2); that the respective target rotation speeds ($n_{VM \text{ setpoint}}$, $n_{E1 \text{ setpoint}}$, $n_{E2 \text{ setpoint}}$) be
10 compared with corresponding actual rotation speeds ($n_{VM \text{ actual}}$, $n_{E1 \text{ actual}}$, $n_{E2 \text{ actual}}$) of the internal combustion engine (VM) and of the electric motors (E1, E2); and that in the case of a system deviation (e_{VM} , e_{E1} , e_{E2}) between one of the actual rotation speeds ($n_{VM \text{ actual}}$, $n_{E1 \text{ actual}}$, $n_{E2 \text{ actual}}$) and the corresponding target rotation speed ($n_{VM \text{ setpoint}}$, $n_{E1 \text{ setpoint}}$, $n_{E2 \text{ setpoint}}$), one or more additional torques ($M_{VM \text{ add}}$, $M_{E1 \text{ add}}$, $M_{E2 \text{ add}}$) be calculated on the basis of the system
15 deviation (e_{VM} , e_{E1} , e_{E2}) and be taken into account, in addition to the target torque or torques ($M_{VM \text{ setpoint}}$, $M_{E1 \text{ setpoint}}$, $M_{E2 \text{ setpoint}}$) calculated by the control system (10), in controlling the torque of the internal combustion engine (VM) and of the two electric motors (E1, E2).